

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ROBERTO ELORREAGA, et al.,

Plaintiffs,

v.

ROCKWELL AUTOMATION, INC., et al.,

Defendants.

Case No. [21-cv-05696-HSG](#)

**ORDER DENYING MOTIONS TO
EXCLUDE EXPERT TESTIMONY**

Re: Dkt. Nos. 119, 122, 126, 127

Pending before the Court are motions to exclude the testimony of several of Plaintiffs' experts at trial—Dr. Brent Staggs, Mr. Jerome Spear, Dr. Allan Smith, and Dr. Barry Horn. Dkt. Nos. 119, 122, 126, 127. Because Defendants' arguments are similar across all four motions, the Court considers them together. The Court finds these matters appropriate for disposition without oral argument and the matters are deemed submitted. *See* Civil L.R. 7-1(b). For the reasons detailed below, the Court **DENIES** the motions.

I. BACKGROUND

Roberto Elorreaga initially brought this lawsuit in the Superior Court of San Francisco, alleging that he developed malignant pleural mesothelioma from exposure to asbestos-containing products or equipment while working aboard United States Naval vessels and in Naval shipyards. *See* Dkt. No. 1-1, Ex. A; Dkt. No. 1-1, Ex. B. Mr. Elorreaga passed away in October 2021, Dkt. No. 55, and his wife and sons, Plaintiffs Rosemary Elorreaga, Robert Paul Elorreaga, Richard Andrew Elorreaga, and Ronald Edward Elorreaga, continue to pursue this case, Dkt. No. 66 ("SAC"). Plaintiffs allege that Defendants either manufactured or supplied the asbestos-containing equipment with which Mr. Elorreaga worked. *Id.*

As related to these motions, Defendants urge that Plaintiffs must proffer evidence that their

specific products were a substantial factor in causing Mr. Elorreaga's illness. *See, e.g.*, Dkt. No. 122 at 4–7; Dkt. No. 126 at 5–6. But according to Defendants, none of Plaintiffs' experts offer such opinions. *See, e.g.*, Dkt. No. 122 at 8, & n.2. Instead, Defendants argue that Plaintiffs' experts are improperly offering "every exposure" or "cumulative dose" causation testimony. *See, e.g.*, Dkt. No. 119 at 3–4, 7–8; Dkt. No. 122 at 8–11, 14–17. Defendants accordingly seek to exclude the testimony of several of Plaintiffs' experts. Dkt. Nos. 119, 122, 126, 127.

II. LEGAL STANDARD

Federal Rule of Evidence 702 allows a qualified expert to testify "in the form of an opinion or otherwise" where:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. Expert testimony is admissible under Rule 702 if the expert is qualified and if the testimony is both relevant and reliable. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993); *see also Hangarter v. Provident Life & Acc. Ins. Co.*, 373 F.3d 998, 1015 (9th Cir. 2004). Rule 702 "contemplates a *broad conception* of expert qualifications." *Hangarter*, 373 F.3d at 1018 (emphasis in original).

Courts consider a purported expert's knowledge, skill, experience, training, and education in the subject matter of his asserted expertise. *United States v. Hankey*, 203 F.3d 1160, 1168 (9th Cir. 2000); *see also* Fed. R. Evid. 702. Relevance, in turn "means that the evidence will assist the trier of fact to understand or determine a fact in issue." *Cooper v. Brown*, 510 F.3d 870, 942 (9th Cir. 2007); *see also Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010) ("The requirement that the opinion testimony assist the trier of fact goes primarily to relevance.") (quotation omitted). Under the reliability requirement, the expert testimony must "ha[ve] a reliable basis in the knowledge and experience of the relevant discipline." *Primiano*, 598 F.3d at 565. To ensure reliability, the Court "assess[es] the [expert's] reasoning or methodology, using as appropriate such criteria as testability, publication in peer reviewed literature, and general acceptance." *Id.* at

1 564.

2 **III. DISCUSSION**

3 As an initial matter, the parties appear to agree that whether California or federal maritime
4 law applies, the Court's analysis is the same. *See, e.g.*, Dkt. No. 127 at 12; Dkt. No. 143 at 9.
5 However, in their own motion for summary judgment, Plaintiffs indicate that "Mr. Elorreaga's
6 pertinent work was aboard navy ships either at sea or under repair at a shipyard and thus *federal*
7 *maritime law applies.*" *See* Dkt. No. 131 at 17 (emphasis added). The Court therefore applies
8 federal maritime law.

9 Plaintiffs bear the burden of establishing that exposure to Defendants' products was a
10 substantial contributing factor in causing Mr. Elorreaga's illness. *See McIndoe v. Huntington*
11 *Ingalls Inc.*, 817 F.3d 1170, 1174, 76–77 (9th Cir. 2016). The Ninth Circuit has explained that "a
12 party may satisfy the substantial-factor test by demonstrating that the injured person had
13 *substantial exposure* to the relevant asbestos for a *substantial period of time.*" *Id.* at 1176
14 (emphasis added). In other words, plaintiffs may proffer evidence regarding "the *amount* of
15 exposure" or "the *duration* of such exposure." *Id.* at 1176–77 (emphasis in original); *see also*
16 *Stephens v. Union Pac. R.R. Co.*, 935 F.3d 852, 856 (9th Cir. 2019) (explaining that proximate
17 cause may be established with evidence that exposure to asbestos-containing product was
18 "sufficiently sustained (or frequent) and intense") (quotation omitted). The Court contrasted such
19 evidence with "[e]vidence of only minimal exposure to asbestos," which "is insufficient." *Id.* at
20 1176. "[T]here must be a high enough level of exposure that an inference that the asbestos was a
21 substantial factor in the injury is more than conjectural." *Id.* (quotation omitted).

22 Defendants urge that none of Plaintiffs' experts provide opinions about the amount or
23 duration of Mr. Elorreaga's exposure attributable to their specific products. Defendants argue that
24 in the absence of quantifying the exposure, the experts' opinions collapse into an "every exposure"
25 theory, and their testimony should be excluded. The Court disagrees.

26 **A. "Every Exposure" Theory**

27 Under the "every exposure" theory, every exposure to asbestos contributes to the total dose
28 and is a substantial factor in causing disease. *See McIndoe*, 817 F.3d at 1177. In *McIndoe*, two

lay witnesses testified that the decedent had been present while others were removing asbestos-containing insulation on approximately 20 to 30 different occasions aboard a U.S. Naval ship, and that this “created large amounts of visible dust” that the decedent breathed. *Id.* at 1175. The plaintiffs’ expert, in turn, “asserted that *every* exposure to asbestos above a threshold level is necessarily a substantial factor in the contraction of asbestos-related diseases.” *Id.* at 1177 (emphasis in original). He therefore did not have to consider the duration or severity of the decedent’s specific exposure. *Id.* Based on this testimony, the plaintiffs concluded that they provided sufficient evidence that the decedent’s exposure to asbestos aboard the ships caused his mesothelioma. *Id.* at 1177 (emphasis in original).

The Ninth Circuit rejected this “every exposure” theory under federal maritime law because it completely undermined the substantial factor test. *Id.* The expert did not consider the severity of the decedent’s exposure “beyond the basic assertion that such exposure was significantly above ambient asbestos levels.” *Id.* And “[m]ore critically,” the expert did not “make distinctions between the overall dose of asbestos [the decedent] breathed aboard the ships and that portion of such exposure which could be attributed to the [defendant’s] materials.” *Id.* The Court reasoned that this approach would “permit imposition of liability on the manufacturer of any [asbestos-containing] product with which a worker had the briefest of encounters on a single occasion.” *See id.* (quotation omitted). The Ninth Circuit noted, however, that a plaintiff may still “satisfy causation through expert testimony that the plaintiff’s actual exposure to certain materials substantially contributed to the development of his injuries.” *Id.* at 117, n.8. “It simply prevents the type of sweeping testimony offered here—that *all* exposures to asbestos above background levels necessarily and substantially contribute to development of diseases like mesothelioma.” *Id.* (emphasis added).

The Court considers each of Plaintiffs’ challenged experts to determine whether they advance this “every exposure” theory in this case.

i. Dr. Staggs

Defendants do not cite to specific sections of Dr. Staggs’ expert report or deposition testimony, but nevertheless contend that he is at least in part relying on an “every exposure”

theory of liability in reaching his conclusions. *See* Dkt. Nos. 119, 122. Having reviewed Dr. Staggs’ expert report, the Court is not persuaded. *See* Dkt. No. 145-1, Ex. 1 (“Staggs Report”). Dr. Staggs does not appear to rely on this theory. In fact, Dr. Staggs explicitly disavows this theory in his report:

When I review an individual’s exposure to asbestos and evaluate the causation of disease, as I have done in this case, I do not state that any contributor to the cumulative dose, no matter how small, is a significant factor to the development of mesothelioma. Rather, I review, evaluate, and consider the information available to me about an individual’s identified exposures to asbestos, and only after that review will I consider causation and attribution of the asbestos exposures.

Id. at 14. During his deposition, he similarly explained that he distinguishes between “trivial” and “significant” exposures to asbestos. *See* Dkt. No. 119-3, Ex. B (“Staggs Depo.”) at 13:24–23. He explained that he is concerned with “the proximity, frequency, and regularity of the exposures to assess their dose or the relative dose” *Id.* at 15:9–11, 16:1–6. These are the same factors that the Ninth Circuit in *McIndoe* identified as important considerations when evaluating causation. *See McIndoe*, 817 F.3d at 1177.

In his report, Dr. Staggs states that he was asked “for [his] opinion regarding the diagnosis of Mr. Elorreaga’s disease, and whether his disease was caused by exposure to asbestos.” Staggs Report at 11. Dr. Staggs concluded that Mr. Elorreaga had malignant mesothelioma of the pleura and pleural plaques, and that the mesothelioma was caused by his “significant exposures to asbestos from his frequent and proximate work with and around asbestos containing products, over his lifetime.” *Id.* at 11–14. He based these conclusions on his review of Mr. Elorreaga’s medical records, pathology materials such as biopsy slides, deposition testimony, answers to interrogatories, and other expert reports in the record. *Id.* at 11–13. He also explained the risks of asbestos exposure from certain kinds of products, such as electrical products, as supported by the medical literature. Staggs Report at 7–10. Although his report does not detail Mr. Elorreaga’s proximity, frequency, or regularity of exposure to any specific product, during his deposition Dr. Staggs explained that if asked he may be able to contextualize questions about specific

Defendants' products based on other information in the record such as Mr. Elorreaga's responses from his deposition testimony. *See* Staggs Depo. at 22:12–29:2.

At bottom, Defendants appear concerned that in his report Dr. Staggs did not quantify the level or dose of exposure that Mr. Elorreaga had to each of their products, and that at trial he may try to offer opinions about specific Defendants' products that are not supported by the record.¹ But *McIndoe* does not preclude consideration of qualitative exposure assessments. And to the extent Defendants argue that Mr. Elorreaga's deposition testimony does not support Dr. Staggs' assumptions about the extent and nature of Mr. Elorreaga's work with any specific product, this is a fact question for the jury. Defendants can challenge the accuracy of these assumptions on cross-examination. But the Court declines the invitation to speculate that, despite rejecting the "every exposure" theory, Dr. Staggs may nevertheless advance this theory at trial. If he did, the undisclosed opinion plainly would be appropriately excluded under Rules 26(a)(2) and 37. The Court therefore **DENIES** the motions to exclude Dr. Staggs' testimony. Dkt. Nos. 119, 122.

ii. Mr. Spear

Defendants similarly argue that Mr. Spear does not provide any Defendant-specific dose information, and that his testimony should therefore be excluded because it collapses into an "every exposure" theory. Dkt. No. 122. Defendants point out that as an industrial hygienist, Mr. Spear could have reconstructed and quantified Mr. Elorreaga's exposure to specific products, but did not do so. *See id.* at 12–14. Yet Mr. Spear explains in his report that he conducted a qualitative rather than quantitative assessment. *See* Dkt. No. 144-1, Ex. 5 at 90 ("Spear Report").

Because neither Mr. Elorreaga nor the ships he worked on were monitored at the time of his alleged exposure, Mr. Spear explained that he had to rely on other evidence to reconstruct his exposure, including "existing data, historical facility information, interviews with workers, and professional judgment." *Id.* at 91. Mr. Spear then detailed the type of work that Mr. Elorreaga engaged in, such as working on pumps, steam traps, valves, and gaskets in the ship's engine room. *See id.* at 93–102. In order to fix leaks on pumps, for example, Mr. Elorreaga testified that he

¹ Defendants note that Dr. Staggs is not an industrial hygienist, which they argue shows he lacks the expertise to opine regarding exposure in any event.

1 would have to disassemble the pump, and remove the gaskets using a wire brush. *Id.* at 93–94.
 2 He said this process created visible dust, as did sweeping up afterward. *Id.* Mr. Elorreaga
 3 couldn't estimate the exact number of times he did this because he said he did this too many times
 4 to quantify and on a regular basis. *Id.* at 94–95. In his report, Mr. Spear identified studies which
 5 measured the level of asbestos fibers released during various activities, such as removing gaskets
 6 and cleaning up afterward. *See id.* at 111–39. He also explained how “visible airborne dust
 7 represents hazardous concentrations above established occupational exposure limits.” *See id.* at
 8 145–48.

9 Although Mr. Spear noted that “[r]epeated studies have shown that all levels of exposure
 10 increase the risk of mesothelioma,” *id.* at 104–05, he did not simply conclude that all Mr.
 11 Elorreaga's exposures to asbestos were the substantial cause of his mesothelioma. Rather, based
 12 on the manner and scope of Mr. Elorreaga's exposure, Mr. Spear concluded that “Mr. Elorreaga's
 13 exposure to asbestos incorporated into gaskets, packing, arc chutes, control panels, electrical wires
 14 and cables, bulkhead wall panels in the living quarters onboard the USS Cowell, TSI, and
 15 refractory materials were significant sources of his exposure.” *Id.* at 152. He further explained
 16 that “[a]sbestos released from these products increased his dose, which in turn, significantly
 17 increased his risk of contracting an asbestos-related disease, such as mesothelioma.” *Id.*

18 In a supplemental report, Mr. Spear provided additional opinions based on new deposition
 19 transcripts from Mr. Elorreaga.² *See* Dkt. No. 144-1, Ex. 9 at 355. Mr. Elorreaga expanded on the
 20 nature of his work and the products with which he worked. *See id.* at 355–66. Based on this
 21 testimony, Mr. Spear provided more granular range estimates for the relevant activities that Mr.
 22 Elorreaga testified that he engaged in. *See id.* at 375–77. For example, Mr. Spear concludes that
 23 as a machinist aboard the USS Rupertus, Mr. Elorreaga was exposed to approximately .05 to 15

24
 25 ² Defendants suggest that this supplemental report was untimely. *See* Dkt. No. 122 at 13. Federal
 26 Rule of Civil Procedure 26 provides that expert disclosures must be made at the times directed by
 27 the Court. *See* Fed. R. Civ. P. 26(a)(2)(D). Rule 37, in turn, provides that if a party fails to
 28 provide the information required by Rule 26(a), “the party is not allowed to use that information or
 witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was
 substantially justified or harmless.” Fed. R. Civ. P. 37(c)(1). But Defendants do not appear to
 request that the Court strike Mr. Spear's supplemental report, and the report appears to have been
 produced at least before the end of expert discovery. *See* Dkt. No. 63 (Scheduling Order).

1 fibers per cubic centimeter (“f/cc”) while removing gaskets “using hand scraping/brushing
2 technique.” *Id.* at 375. In short, Mr. Spear considered the type of work Mr. Elorreaga performed;
3 the amount of time he engaged in such work; and the amount of asbestos produced from such
4 activities measured in f/cc. Despite Defendants’ urging, Mr. Spear’s opinions do not “leave[] it to
5 the Defendants to disprove causation.” Dkt. No. 122 at 14. They seem entirely consistent with
6 *McIndoe*. See *McIndoe*, 817 F.3d at 1177.

7 The Supreme Court has cautioned that the *Daubert* inquiry is intended to be flexible, and
8 that when evaluating specialized or technical expert opinion testimony, “the relevant reliability
9 concerns may focus upon personal knowledge or experience.” See *Kumho Tire Co. v.*
10 *Carmichael*, 526 U.S. 137, 150 (1999). The Ninth Circuit has recognized that this is particularly
11 true in the medical context because “[t]he human body is complex” and “etiology is often
12 uncertain.” *Primiano*, 598 F.3d at 565–66 (quotations omitted). This uncertainty is compounded
13 here, where the latency period for mesothelioma is long and experts are attempting to reconstruct
14 work history and exposure from decades ago.

15 Defendants may take issue with the precision of Mr. Spear’s calculations or whether his
16 testimony—on its own or in collaboration with Plaintiffs’ other experts—can establish liability as
17 to any specific Defendant, but on the record before it the Court sees no reason to exclude Mr.
18 Spear’s testimony at trial. Mr. Spear does not appear to rely on an “every exposure” theory of
19 causation. The Court therefore **DENIES** the motion to exclude Mr. Spear’s testimony. Dkt. No.
20 122.

21 **iii. Dr. Smith**

22 Next, Defendants seek to exclude the testimony of Plaintiffs’ epidemiologist, Dr. Smith.
23 See Dkt. No. 126. As with Dr. Staggs and Mr. Spear, Defendants point out that Dr. Smith’s report
24 does not contain opinions that any Defendant-specific product (*e.g.*, a GE or Westinghouse
25 electrical component) substantially contributed to Mr. Elorreaga’s mesothelioma. *Id.* at 1, 4–6.
26 Rather, he concludes that “[t]he evidence indicates that Mr. Elorreaga was exposed to asbestos
27 dust during his time in the US Navy,” and that this “asbestos dust inhalation caused his
28 mesothelioma cancer.” Dkt. No. 146-1, Ex. B (“Smith Report”) at 26. Dr. Smith further explains

1 why, in his opinion, all types of asbestos fiber—chrysotile, amosite, and crocidolite—can cause
 2 mesothelioma. *See id.* at 28–29. Defendants suggest that this testimony is irrelevant to the case.
 3 *See* Dkt. No. 126 at 4–6. They further urge that to the extent Dr. Smith does offer any Defendant-
 4 specific opinions, they are premised on an improper “every exposure” theory of liability. *Id.* at 7–
 5 18. The Court is not persuaded.

6 *First*, Defendants argue that Dr. Smith should not be able to offer any general causation
 7 testimony about the fact that asbestos may cause mesothelioma. *Id.* at 1, 4–6. At least Defendants
 8 GE and Westinghouse contend that they do not dispute that Mr. Elorreaga’s mesothelioma was
 9 caused by asbestos. *Id.* at 5 (“GE and Westinghouse [] do not dispute that during his Navy
 10 service, Mr. Elorreaga was exposed to enough asbestos dust to explain his eventual diagnosis of
 11 mesothelioma.”). They accordingly urge that Dr. Smith’s testimony would not assist the trier of
 12 fact. But GE and Westinghouse are not the only Defendants in this case. And even if they were,
 13 general causation evidence about how asbestos can cause mesothelioma is still relevant to the trier
 14 of fact.

15 Defendants rely heavily on a recent case, *Shelton v. Air & Liquid Sys. Corp.*, 610 F. Supp.
 16 3d 1280, 1285–87 (N.D. Cal. 2022), to argue that general causation testimony should be excluded.
 17 *See* Dkt. No. 169 at 2–4. But Defendants overread that case. In *Shelton*, the court did not
 18 conclude that general causation testimony was never admissible. To the contrary, the court
 19 explained that the parties were only challenging the specific-causation opinions of one of the
 20 plaintiffs’ experts, Dr. Edwin Holstein. *See Shelton*, 610 F. Supp. 3d at 1282, n.1; *see also id.* at
 21 1286, n.4. Although the court granted the motion to exclude these specific opinions, the court also
 22 found that “Dr. Holstein’s opinions on general causation, and the impact that exposure to asbestos
 23 has on one’s health, has foundation and are scientifically sound.” *See id.* at 1286, n.4.

24 Although Plaintiffs ultimately will have to introduce evidence from which a jury could
 25 infer that each of Defendants’ products was a substantial factor in causing Mr. Elorreaga’s
 26 mesothelioma, that does not render Dr. Smith’s opinions irrelevant. Defendants’ own authorities
 27 explain that “[e]xpert testimony assists the trier of fact when it provides information beyond the
 28 common knowledge of the trier of fact.” *United States v. Finley*, 301 F.3d 1000, 1008 (9th Cir.

2002) (citing Fed. R. Evid. 702). Although Defendants may understand that mesothelioma is caused by asbestos exposure, there is no reason to assume a lay juror would understand this absent testimony from Plaintiffs’ experts.

Second, Defendants urge that any Defendant-specific causation testimony that Dr. Smith provides would necessarily be improper and rely on an “every exposure” theory. *See* Dkt. No. 126 at 7–18. Defendants point out that during his deposition, Dr. Smith stated that he considers all exposures to be “meaningful and important.” *See* Dkt. No. 146-1, Ex. C at 64 (ll. 28:16–35:23). But Defendants appear to take this exchange out of context. During the deposition, Defendants’ counsel—not Dr. Smith—first raised the idea that all asbestos exposures are “meaningful and important.” *Id.* Counsel stated that years earlier Dr. Smith had said in a previous deposition that he considers asbestos exposures to be “meaningful and important because they add to the dose.” *Id.* Dr. Smith clarified that “[a]ll inhalation of asbestos dust adds to the dose that increases the risk.” *Id.* at 64–65 (ll. 28:25–29:4). He did not state that he believes this somehow replaces the substantial factor test in *McIndoe*. Nor did he suggest that he would offer any such testimony at trial. Again, defense counsel—not Dr. Smith—raised this during the deposition. There is simply no basis to conclude that Dr. Smith will advance an “every exposure” theory at trial.

Defendants appear concerned that Dr. Smith may offer testimony that is inconsistent with or beyond the scope of the opinions he provided in his report and deposition testimony. Dkt. No. 126 at 6–8. Defendants note, for example, that “after obvious signaling from Plaintiffs’ counsel during his deposition,” Dr. Smith suggested that he may respond to hypotheticals if asked at trial. *Id.* at 6; *see also* Dkt. No. 146-1, Ex. C at 60 (ll. 24:19–25:9). Specifically, when asked whether he has any other “case-specific opinions,” Dr. Smith simply said “I think it would depend on what I was asked.” *See id.* Based on this exchange, Defendants argue that any product-specific causation opinions would violate Federal Rule of Civil Procedure 26. *See* Dkt. No. 126 at 6–8.

Rule 26 requires that the parties exchange expert reports that contain “a complete statement of all opinions the witness will express and the basis and reasons for them.” Fed. R. Civ. P. 26(a)(2)(B)(i). But currently, there is no evidence that Plaintiffs intend to offer testimony beyond the scope of Dr. Smith’s original expert report. In their opposition brief, Plaintiffs appear

1 to concede that Dr. Smith is only offering general causation testimony. *See* Dkt. No. 146 at 11. If
 2 at trial Dr. Smith nevertheless offers testimony beyond the scope of his expert report, Defendants
 3 may raise this argument at that time. The Court will not, however, preemptively exclude Dr.
 4 Smith’s testimony based on what Defendants think he may testify to at trial. The Court **DENIES**
 5 the motion to exclude Dr. Smith’s testimony. Dkt. No. 126.

6 **iv. Dr. Horn**

7 Lastly, Defendants seek to exclude the testimony of Dr. Horn, Plaintiffs’ expert
 8 pulmonologist. Dkt. Nos. 122, 127.

9 Much like Dr. Smith’s testimony, Defendants contend that Dr. Horn’s general causation
 10 opinions do not “fit” the case and should not be admitted. *See* Dkt. No. 127 at 6–12. At least
 11 Defendants GE and ViacomCBS state that they do not contest that mesothelioma is caused by
 12 asbestos. *Id.* at 7. Therefore, they urge, the only question an expert may opine on is whether the
 13 “exposure from every identified product was a substantial factor in causing Mr. Elorreaga’s
 14 mesothelioma.” *Id.* For the reasons discussed in Section III.A.iii above, the Court is not
 15 persuaded that this is a reason to exclude Dr. Horn’s general causation opinions.

16 As to any specific causation opinions, Defendants argue that Dr. Horn relies on a
 17 “cumulative dose” theory of liability, which they call a variant of the “every exposure” theory.
 18 *See* Dkt. No. 122 at 8–11; *see also* Dkt. No. 127 at 12–18. Defendants explain that under the
 19 “cumulative dose” theory, the decedent’s cumulative exposure to asbestos over his lifetime caused
 20 the disease. *See* Dkt. No. 122 at 3, 7, & n.1. Defendants argue that under this theory, as with the
 21 “every exposure” theory, any specific exposure to asbestos is irrelevant because all exposures
 22 ultimately contribute to the disease. *Id.*; *see also Krik v. Exxon Mobil Corp.*, 870 F.3d 669, 675–
 23 77 (7th Cir. 2017) (excluding expert’s cumulative dose theory that “[e]ither it’s zero or it’s
 24 substantial; there is no such thing as not substantial” because “[e]ven one minute of exposure . . .
 25 would be a substantial contributing factor to a person’s ultimate disease”).

26 During his deposition, Dr. Horn explained that mesothelioma is dose dependent and the
 27 more asbestos exposure a person has, the more likely it is he will develop mesothelioma. *See* Dkt.
 28 No. 144-1, Ex. 7 at 193–94 (ll. 20:23–21:7). He said that on a cellular level no one knows how

1 many asbestos fibers are needed to cause changes in DNA, but that we know the more someone
 2 inhales and retains in his lungs, the more likely he will develop mesothelioma. *See id.* at 194
 3 (ll. 21:8–22); *see also id.* at 207–08 (ll. 72:10–73:11). He said that “[i]t takes very little exposure
 4 to asbestos on a relative scale to cause mesothelioma.” *Id.* at 204 (ll. 45:13–14). But Dr. Horn
 5 made clear that he does not believe “every exposure” contributes to mesothelioma. *Id.* at 201–02
 6 (ll. 40:23–41:22). He called the idea that a single fiber could cause mesothelioma “nonsense.” *Id.*
 7 In doing so, he rejected defense counsel’s hypothetical and emphasized that in this case, Mr.
 8 Elorreaga had sustained exposure to asbestos from his own work and from being present while
 9 others were working with asbestos-containing products too. *Id.*; *see also id.* at 207–08 (ll. 72:10–
 10 73:11); *id.* at 211–13 (ll. 102:25–104:10). Dr. Horn’s explanation that workers in shipyards are
 11 exposed to similar amounts of asbestos is not the same as the “every exposure” theory. Rather,
 12 Dr. Horn considered the nature of the work—and the amount of asbestos released into the air as
 13 part of that work—when reaching his conclusions. *Id.*

14 Defendants also point out that Dr. Horn testified in prior cases that “there is no difference
 15 between a contributing factor and a substantial contributing factor.” *See* Dkt. No. 122 at 10–11;
 16 *see also* Dkt. No. 122-1, Ex. A at 6–7 (ll. 70:22–71:20). Counsel asked about this during Dr.
 17 Horn’s deposition in this case. *Id.* Putting aside that none of these terms are defined in the
 18 deposition, the Court understands Defendants’ concern that this language could be interpreted to
 19 advance an “every exposure” theory. But Dr. Horn appeared to clarify in his deposition that he
 20 simply meant that mesothelioma is dose dependent. Dkt. No. 122-1, Ex. A at 7 (ll. 71:6–20). He
 21 further explained that some exposures may be bigger and therefore will contribute more to the
 22 risk. *Id.* Moreover, in his three reports, Dr. Horn did not simply conclude that every exposure
 23 satisfies the substantial factor test. *See* Dkt. No. 144-1, Exs. 1–3. He reviewed Mr. Elorreaga’s
 24 medical records, death certificate, and deposition testimony in which he described his work history
 25 and exposures to asbestos. *See, e.g.,* Dkt. No. 144-1, Ex. 1 at 21–27, 34–36. He also reviewed
 26 other expert reports, including Mr. Spear’s report, which described the amount of asbestos
 27 released from certain activities that Mr. Elorreaga performed. Dkt. No. 143-1, Ex. 1 at 8–11. Dr.
 28 Horn therefore does not appear to advance an “every exposure” theory in this case.

1 To the extent Defendants also argue that Dr. Horn did not provide opinions about the
 2 amount of asbestos Mr. Elorreaga was exposed to from any specific Defendant's product, the
 3 Court is not persuaded that his opinions should be excluded on this basis. *See* Dkt. No. 127 at 2–
 4 4, 8–10. Dr. Horn's testimony is still helpful to the trier of fact in determining risk from Mr.
 5 Elorreaga's specific exposures, even if it is based on qualitative rather than quantitative
 6 assessments of such exposure. Courts have recognized that "[p]roof of causation in such cases
 7 will always present inherent practical difficulties, given the long latency period of asbestos-related
 8 disease, and the occupational settings that commonly exposed the worker to multiple forms and
 9 brands of asbestos products with varying degrees of toxicity." *Rutherford v. Owens-Illinois, Inc.*,
 10 16 Cal. 4th 953, 957 (Cal. 1997), *as modified on denial of reh'g* (Oct. 22, 1997). But as the Ninth
 11 Circuit has acknowledged, "[l]ack of certainty is not, for a qualified expert, the same thing as
 12 guesswork." *Primiano*, 598 F.3d at 565.

13 As with all Plaintiffs' experts, Defendants believe that Mr. Elorreaga's deposition
 14 testimony does not support Dr. Horn's assumptions about the extent and nature of Mr. Elorreaga's
 15 work with any specific product. *See* Dkt. No. 127 at 2–4. For example, Defendants argue that Mr.
 16 Elorreaga never said how many times he cleaned arc chutes or whether the dust he saw was from
 17 the chutes themselves or some other product. *See id.* at 2–4; *see also* Dkt. No. 127-1, Ex. C at 128
 18 (ll. 61:14–62:4, 66:24–67:17, 74:23–75:6, 116:15–117:2). But Defendants can challenge the
 19 accuracy of these assumptions on cross-examination. "Vigorous cross-examination, presentation
 20 of contrary evidence, and careful instruction on the burden of proof are the traditional and
 21 appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596. The
 22 Court **DENIES** the motion to exclude Dr. Horn's testimony. Dkt. Nos. 122, 127.

23 * * *

24 As explained above, the Court does not credit Defendants' argument that Plaintiffs' experts
 25 are advancing an "every exposure" theory of liability in this case. Still, to the extent any of
 26 Plaintiffs' experts attempt to offer such "every exposure" opinions (notwithstanding their reports),
 27 such testimony will be excluded. *See, e.g., McIndoe*, 817 F.3d at 1177 (rejecting "every exposure"
 28 theory because it would "permit imposition of liability on the manufacturer of any [asbestos-


1 containing] product with which a worker had the briefest of encounters on a single occasion”)
2 (quotation omitted); *Krik*, 870 F.3d at 673–77 (same).

3 **IV. CONCLUSION**

4 Accordingly, the Court **DENIES** the motions to exclude the testimony of Plaintiffs’
5 experts. However, this denial is without prejudice to Defendants’ ability to seek to exclude the
6 testimony at trial to the extent it actually crosses the line into advancing an “every exposure”
7 theory or strays into any opinion not timely and adequately disclosed under Rule 26(a).

8 **IT IS SO ORDERED.**

9 Dated: 3/30/2023

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11 HAYWOOD S. GILLIAM, JR.
12 United States District Judge
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